

REMARKS

Claims 1-9 and 11-20 are pending in this application. By this Amendment, claims 1, 5, 7, 9 and 11 are amended, and claim 10 is canceled without prejudice to or disclaimer of the subject matter therein. Claims 17-20 are added to recite features supported in the specification. No new matter is added. Reconsideration in view of the above amendments and the following remarks is respectfully requested.

The courtesies extended to Applicant's representatives by Examiner Kovalick at the interview held January 11, 2007, are appreciated. The reasons presented at the interview as warranting favorable action are incorporated into the remarks below and constitute Applicant's record of the interview.

35 U.S.C. §112 Rejection of Claims 9, 10 and 15

The Office Action rejects claims 9, 10 and 15 under 35 U.S.C. §112, second paragraph. The rejection of claim 10 is moot because claim 10 is canceled by this Amendment. In particular, the Office Action asserts that in claim 9, the phrase "the element formation area disbursed at a central portion, and the element formation area being disposed around the element formation area" is not clear. The Office Action rejects claims 10 and 15 for their dependence on claim 9. The Office Action rejects the phrase "the element formation area" because it appears to be disposed around itself. To obviate the §112 rejection of claims 9 and 15, claim 9 is amended to recite "the element formation area disbursed at a central portion and the circuit formation area being disposed around the element formation area." Accordingly, Applicant respectfully requests that the §112 rejections of claims 9 and 15 be withdrawn.

35 U.S.C. §103 Rejections

The Office Action also rejects claims 1-6, 13 and 14 under 35 U.S.C. §103(a) over Mikami (U.S. Publication No. 2003/0111966) in view of Komiya (U.S. Publication No.

2003/0030601); rejects claims 7, 8, 11 and 16 under 35 U.S.C. §103(a) over Mikami in view of Komiya and further in view of Hayashi (U.S. Publication No. 2001/0011898) and Martin (U.S. Patent No. 6,356,248); and rejects claim 12 over Mikami in view of Komiya, Hayashi, Martin and further in view of Nicholas (U.S. Patent No. 5,490,002). Applicant respectfully traverses these rejections.

35 U.S.C. §103(a) Rejection of Claims 1-6, 13 and 14

Specifically, Applicant asserts that Mikami, Komiya, Hayashi, Martin and Nicholas, either individually or in combination, fail to disclose or suggest an electronic device having a plurality of unit circuits in correspondence with intersections of a plurality of first signal lines and a plurality of second signal lines, the plurality of unit circuits including a unit circuit in which at least two electronic elements are electrically connected in parallel with an active element, as recited in amended independent claim 1, and similarly recited in amended independent claim 3. The cited references further fail to disclose or suggest, that the plurality of unit pixels each include a control electronic element which is electrically disconnected from the electro-optical elements, as recited in independent claim 4.

Specifically, Mikami teaches an electro-optical image display apparatus (pages 2 to 3, paragraphs [0012] - [0033]) that uses an electronic device comprising a plurality of unit circuits in correspondence with intersections of a plurality of first signal lines and a plurality of second signal lines; each active element controlling the drive voltage or the drive current (page 2, paragraph [0013]). Mikami, on page 2, paragraph 15, discloses a configuration where a memory control samples and holds a signal voltage while blocking a connection with each of the driving elements.

Mikami fails to disclose the plurality of unit circuits including a unit circuit in which at least two electronic elements are electrically connected in parallel with an active element, as recited in amended independent claim 1 and similarly recited in amended independent

claim 3. Regarding independent claim 4, Mikami fails to disclose or suggest the plurality of unit pixels each including a control electronic element which is electrically disconnected from the electro-optical elements.

Komiya fails to cure the deficiencies of Mikami. Specifically, Komiya teaches an organic EL circuit which can perform grayscale control such that display unevenness is not generated. Komiya discloses a plurality of organic EL elements (subpixels) TFTs provided in the pixel, where the plurality of organic EL elements are toggled, and driving transistors, e.g. Fig. 1, TFT 1-1, TFT 2-1, are different sizes. With such a structure, the grayscale can be controlled by switching the driving transistors fully on. Komiya further discloses that the threshold voltage of the driving transistor can be removed and preferably a grayscale control can be achieved. Thus, Komiya fails to disclose or suggest a plurality of unit circuits in correspondence with the intersections of a plurality of first signal lines and a plurality of second signal lines, the plurality of unit circuits including a unit circuit in which two electronic elements are electrically connected in parallel with an active element, as recited in independent claim 1 and similarly recited in amended independent claim 3. Accordingly, Komiya therefore fails to disclose or suggest the plurality of unit pixels each including a control electronic element which is electrically disconnected from the electro-optical elements, as recited in independent claim 4.

35 U.S.C. §103(a) Rejection of Claims 7, 8, 11 and 16

With respect to independent claims 7 and 11, the Office Action admits that Mikami and Komiya fail to disclose or suggest that each unit pixel having a plurality of electro-optical material placement areas where electro-optical material is placed, and the plurality of unit pixels including a unit pixel having an electro-optical material placement area in which the electro-optical material does not operate, among the plurality of electro-optical material placement areas.

Hayashi fails to cure the deficiencies of Mikami and Komiya because Hayashi, at Fig. 1, discloses an active matrix display in which pixels are arranged in the matrix and driving circuits 1 are incorporated peripheral to the pixels. The matrix includes a plurality of gate lines X and a plurality of data lines Y formed on a substrate so as to be mutually perpendicular, where the pixels arranged at the intersections of the gate and data lines and the pixels are driven by the gate X and the data lines Y.

Martin at column 2, lines 4-67, and column 3, lines 1-39 teaches a flat panel liquid crystal display having an addressing structure that uses an ionizable gaseous medium captured within two electrode structures. Martin discloses an electro-optical addressing system, that uses an addressing structure that maintains a layer of electro-optical material at a uniform, predetermined thickness. Martin discloses that such an electro-optical structure does not degrade a displayed image nor deform nor damage the dielectric sheet through the use of spacers that are formed in inactive display regions, particularly in areas that are directly above the top surfaces of the support structures of the first electro-structure.

Thus, Mikami, Komiya, Hayashi and Martin, either individually or in combination, fail to disclose or suggest a plurality of unit pixels in correspondence with intersections of a plurality of scanning lines and a plurality of data lines, where the plurality of unit pixels including a unit pixel having at least one electro-optical material placement area in which the electro-optical material does not operate, among the plurality of operational electro-optical material placement areas, as recited in independent claim 7 and similarly recited in independent claim 11.

Conclusion

In accordance with the above remarks, Applicant respectfully submits that independent claims 1, 4, 7, 9 and 11 define patentable subject matter. Claims 2, 5, 6, 8, 12-14 and 16 depend from independent claims 1, 4, 7, and 11, respectively, and therefore also define

patentable subject matter, as well as for the additional features they recite. New claims 17-20 are added to recite additional features supported in the specification, at least for example, at Figs. 4, 3 and 8, paragraphs [0055] - [0063], and paragraph [0132]. Thus, Applicant respectfully requests that the Examiner withdraw the §103(a) rejection.

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1-9 and 11-20 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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JAO:EXC/rle

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